

DCAF Bulletin

Design Construction Analysis Feedback

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CEMP-C

Subject:

Ten Most Common Safety Deficiencies FY97-98

Applicability:

Information

We published the ten most common safety deficiencies noted during our design construction evaluations last year as DCAF Bulletin 97-08. While we have had a fairly safe year we still must be continually vigilant. Safety at the construction site is everyone's responsibility. A review of the information contained in our Construction Evaluation Retrieval System (CERS) shows that our biggest problem in the field, safety wise, is in the area of the temporary electrical installation and maintenance. There were more than twice the number of comments relating to electrical problems than the next largest violation which was related to adequate fall protection for construction workers and the general public. We are therefore challenged to review our commitment to safety and to audit our management practices to assure full compliance with applicable regulations, guidance and best industry practice. You should use these observations as a starting place to facilitate your self evaluation. These violations are presented in order of frequency of observation. The references in parenthesis are the applicable paragraphs in EM 385-1-1, Safety and Health Requirements Manual, dated 3 September 1996.

- 1. Temporary power cords not protected from damage including that caused by foot traffic, vehicles, sharp corners, etc. (11.A.03.b); supporting temporary power cords with bare wire (11.A.03.e); temporary power cords are not rated hard usage or extra hard usage (11.A.03.a); switch boxes, receptacles boxes, metal cabinets not marked to show maximum operating voltage (11.A.06); temporary power plan has not been submitted and accepted (11.D.01); no measurement of ground resistance and continuity has been provided the Corps (11.D.02); temporary lighting circuits had bulbs not protected by guards (11.D.06.a); light sockets empty or with broken bulbs (11.D.06.c); temporary wiring in confined spaces did not have a disconnect switch at or near the entrance (11.D.07); temporary power panels or power panels under renovation were not secured/covered to prevent unauthorized personnel from having access to them (11.A.01.b & NEC 110-17.a).
- 2. Inadequate protection of excavations from accidental falls, i.e., no protective fences or barricades (25.A.08.a & 25.B.01.a); openings in floors not protected by standard guard rail on all exposed sides (21.A.15.b and 24.A.01); platforms without railings on exposed ends (21.A.15.c)

- 3. Scaffolds not constructed properly. They lack an access ladder (22.B.08), they have no toe boards (21.B.01 & 21.B.06), planks not secured to prevent movement (22.B.06.a), they have no intermediate rails or no side rails at all (21.B.01), tall scaffolds not secured to structure (22.B.09), Rolling scaffolds did not have wheels locked to prevent movement while in use (22.C.06.b).
- 4. Activity hazard analysis are not provided or they do not address all hazards associated with the item of work (01.A.09); activity hazard analysis not accepted by the designated government authority and/or not discussed by all personnel involved before activity starts (01.A.09.b); no activity hazard analysis prepared for each USACE activity field operation (01.A.10).
- 5. No fire extinguishers where required on equipment (16.A.26), at fueling points (09.B.03.a &b), or where welding (10.C.01).
- 6. Contractor safety plans not approved or otherwise not complete (01.A.07); weekly "tool box" safety meetings not being held for all employees (01.B.03.a); safety meetings are not being documented (01.B.03.b).
- 7. Job site ladders are not constructed properly, are too short, are not properly tied off, etc. (21.D.01 thru 21.D.11).
- 8. Rebar not covered to protect personnel working around or above from impalement hazards (05.A.13). Note: Unreinforced rebar caps do not meet the OSHA requirements for protection from impalement.
- 9. Personnel not wearing eye protection while performing activities such as cutting tile and masonry block which require safety goggles/glasses (5.B.01.c).
- 10. Lasers in use without laser warning signs (06.F.01.b); lasers not shut off at lunch hour (06.F.01.e); laser units not set above the heads of employees where possible (06.F.01.g).

With the exception of item 4, the existence of these and other safety hazards is indicative of poor management by the contractor of his/her accident prevention program. The focus of our actions should be on the improvement of the contractor's safety management efforts as opposed to Corps assumption of an inspection and enforcement role. Item 4 is the failure in our own operations in that we allow the contractor to start activities without completing his or our own safety responsibilities. Safety on the job site is a joint team effort, so lets all do our part to insure safe working conditions.

Engineering and Construction Division